SECTION 9: BILL OF QUANTITIES

BRUHAT BENGALURU MAHANAGARA PALIKE
Road Infrastructure- Dasarahalli - Division
Widening & Comprehensive Development of Singapura Garden Road from Abbigere Main Road (Precision Components Factory) to Shrinikethan Layout (BDA Layout)

PART-A

Sl No	Description	Unit	Qunty	Rate in Rupees		Amount Rs
				Figures	Words	
1	KSRRB M200-32. Removal of Telephone / Electric poles including excavation and dismantling of foundation concrete and lines under the supervision of concerned department, disposal with all lifts and stacking the serviceable and unserviceable material separatelycomplete as per specifications. MORTH Specification No. 202	Nos	52	230.02	Two Hundred Thirty Rupees and Two Paise only.	11961
2	"KSRRB M200-29. Dismantling of barbed wire fencing / wire mesh fencing including posts, foundation concrete, back filling of pit by manual means including disposal of dismantled material with all lifts and stacking serviceable material and unserviceable material separately complete as per specifications.MORTH Specification No. 202	M	260	69.96	Sixty Nine Rupees and Ninety Six Paise only.	18190
3	KSRRB M20Q-17.1.Dismantling of existing Steel work in all types of Sections upto a Height of 5 m above plinth level excluding Cutting of Rivet, including	Tonne	1	2006.58	Two Thousand Six Rupees and Fifty Eight Paise only.	2007

Sl No	Description	Unit	Qunty	Rate in Rupees		Amount
				Figures	Words	
	T&P and scaffolding wherever necessary, sorting the dismantled material, disposal of unserviceable material and stacking the serviceable material with all lifts - A.Including dismembering." complete as per specifications.					
4	KSRRB 200-1. Cutting of trees girth from 300mm to 600mm including cutting of trunks, branches and removal of stumps roots stacking of serviceable materials earth filling in the depressions / pit, labour charges complete as per specifications. MORTH specification clause 201/ Chapter 2 300-600mm	Nos	5	316.94	Three Hundred Sixteen Rupees and Ninety Four Paise only.	1585
5	- do- KSRRB M200-2 : - do - 600mm to 900mm	Nos	25	977.32	Nine Hundred Seventy Seven Rupees and Thirty Two Paise only.	24433
6	KSRRB M200-3: - do - 900mm to 1800mm	Nos	10	2377.58	Two Thousand Three Hundred Seventy Seven Rupees and Fifty Eight Paise only.	23776
7	KSRRB M200-4: - do - 1800mm to 2700mm	Nos	6	3698.34	Three Thousand Six Hundred Ninety Eight Rupees and Thirty Four Paise only.	22190

Sl No	Description	Unit	Qunty	Rate in Rupees		Amount Rs
				Figures	Words	
8	KSRRB M200-14.1. Dismantling of existing structures like culverts,bridges, retaining walls and other structure comprising of masonry, cement concrete, wood work, steel work, including T&P and scaffolding wherever necessary, sorting the dismantled material, disposal of unserviceable material and stacking the serviceable material with all lifts complete as per specifications, B. In cement mortar. MORTH Specification No. 202 KSRRB M200-14.2. -d o - Dismantling brick/Tile work B. In cement mortar including loading and unloading and disposal to a lead of 20km as per direction of Engineer In Charge	Cum	170.90	487.6	Five Hundred Eighty Seven and Six Paise only.	83331
9	KSRRB M200-15.1. Dismantling of existing structures like culverts, bridges, retaining walls and other structure comprising of masonry, cement concrete, wood work, steel work, including T&P and scaffolding wherever necessary, sorting the dismantled material, disposal of unserviceable material and stacking the serviceable material with all lifts complete as per specifications,iii) Dismantling Stone Masonry. MORTH Specification No. 202 KSRRB M 200-15.2. -d o - B. Rubble stone masonry in cement	Cum	330.97	372.06	Three Hundred Seventy Two Rupees and Six Paise only.	123141

Sl No	Description	Unit	Qunty	Rate in Rupees		Amount Rs
				Figures	Words	
	mortar.					
10	Disposable of dismantaled unservicable Rubble stone masonry including with all loading and unloading and disposed to a lead up to 20km as per the direction of Engineer incharge	Cum	281.33	115.54	One Hundred Fifteen Rupees and Fifty Four Paise only.	32504
11	KSRRB M200-13.1. Dismantling of existing Structures like Culverts, Bridges, Retaining Walls and other Structures comprising of Masonry, Cement Concrete, Wood Work, Steel Work, including T & P and Scaffolding wherever necessary, sorting the dismantled Material, disposal of unserviceble Material, disposal of unserviceble Material and stacking the serviceble Material and serviceble Material with all lifts complete as per Specifications. By mechanical means, A cement concrete grade M-15 & M-20 including loading and unloading and disposal to a lead of 20km As per the direction of the engineer Incharge	Cum	289.50	528.94	Five Hundred Twenty Eight and Ninty Four Paise only.	153128
12	KSRRB M200-26. Dismantling Kerb stone by manual means and disposal of dismantled materials with all lifts and	m	590.00	12.72	Twelve Rupees and Seventy Two Paise only.	7505

Sl No	Description	Unit	Qunty	Rate in Rupees		Amount Rs
				Figures	Words	
	complete as per specifications.MORTH Specification No. 202					
13	KSRRB 200-8. Clearing and grubbing road land including uprooting rank vegetation, rass, brush, shrubs, saplings and trees of girth upto 300mm,by manual means, in area of light jungle, removal of stumps, disposal of unserviceable materials, stacking of serviceable materials labour charges complete as per specifications. MORTH / Chapter 2 (Throny Jungle)	Sqm	9650	10.60	Ten Rupees and Sixty Paise only.	102290
14	KSRRB 300-50. Scarifying bituminous course 50mm to 75mm thick along with premix carpet / surface dressing by mechanical means attached with scarifier without disturbing the base and stacking the debris including cost of all labour charges, HOM complete as per specifications. MORTH I Chapter 3	Sqm	1705.00	41.34	Forty One Rupees and Thirty Four Paise only.	70485
15	KSRRB M300-14. Excavation for roadwork in all types of soil by mechanical means including cutting and loading to tippers, trimming bottom and side slopes, in accordance with requirements of lines, grades and cross sections, and transportation with a lead of 21.00 km and complete as per specifications. MORTH	Cum	10821.73	43.46	Forty Three Rupees and Forty Six Paise only.	470312

Sl No	Description	Unit	Qunty	Rate in Rupees		Amount Rs
				Figures	Words	
	Specification No.301					
16	Earth work in excavation for foundation of structures like culverts , retaining walls etc., as per drawing and technical specification, including setting out, construction of shoring and bracing, dressing of sides and bottom, back filling with approved material, disposal of balance earth as per specifications, including cost of labour, HOM etc, complete. in all kinds of soil by Mechanical means	Cum	528.00	47.70	Forty Seven Rupees and Seventy Paise only.	25186
17	Disposable of excavated un servicable road way earth with all lead of 19 km as per the direction of Engineer in charge	Cum	10821.73	48.64	Fourty Eight Rupees and Sixty Four Paise only.	526369
18	KSRRB M300-54.Construction of embankment with approved material deposited at site from roadway cutting and excavation from drain and foundation of other structures graded and compacted to meet requirement of Table 300-2 complete asper specifications. Which includes, watering charges & compaction by vibratory roller) MORTH Specification No. 305	Cum	1129.65	100.70	One Hundred Rupees and Seventy Paise only.	113756

Sl No	Description	Unit	Qunty	Rate in Rupees		Amount Rs
				Figures	Words	
19	KSRRB M300-53. Construction of sub-grade and earthen shoulders with approved material Gravel/Murrum with all lifts & leads, transporting to site,spreading, grading to of watering charges & compaction by vibratory roller to 97% of modified Table No. 300-2 complete as per specifications, including cost of earth,required slope and compacted to meet requirement watering charges & compaction by vibratory roller to 97% of modified proctors density) MORTH Specification No. 305	Cum	1923	344.50	Three Hundred Forty Four Rupees and Fifty Paise only.	662370
20	Providing and laying in possition plain cement concrete of mix 1:2:4 for sub-structure works like Culverts,retaining walls etc.,with cement@ 240 kgs, 40 mm & down size graded granite metal coarse aggreate @ 0.84 cum and fin aggregates @ 0.46cum machine mixed, with necessary scoffolding form work etc., including cost of labour, HOM curing etc., complete	Cum	420	5023.34	Five Thousand Twenty Three Rupees and Thirty Four Paise only.	1988941
21	Providing and laying in position plain/Reinforced cement cement concrete M20 for sub-structure/Superstructure works, with cement @ 320 kgs, 20 mm & down size graded granite metal coarse	Cum	611.1	5404.94	Five Thousand Four Hundred Four Rupees and Nity Four Paise only.	3302959

Sl No	Description	Unit	Qunty	Rate in Rupees		Amount Rs
				Figures	Words	
	aggregate @ 0.69 cum and fine aggregates @ 0.46 cum machine mixed with super plasticisers @ 3lts confirming to IS 9103-2008,concrete laid in layers, well compacted and providing weep holes wherever necessary with necessary scaffolding,form work etc., including cost of labour, HOM curing etc., complete.					
22	KSRRB M2200-5.9. Providing and laying Design mix M20 with OPC @ 320kgs, with 20mm and down size graded granite metal coarse aggregates @0.69cum and fine aggregates @ 0.46cum, with superplastisiser @3lts confirming to IS9103-1999 Reaffirmed-2008 including cost of materials, labour, HOM curing, form works, scaffolding and centering complete as per specifications. - i) Upto 5 m height	Cum	950	5610.58	Five Thousand Six Hundred Ten Rupees and Fifty Eight Paise only.	5330612
23	KSRRB M2200-6. Providing T.M.T steel reinforcement for R.C.C work including straightening, cutting, bending, hooking placing in position lapping and /or welding wherever required , tying with binding wire and anchoring to the adjoining members wherever necessary complete as design (laps, hooks and wastage shall not be measured and paid) cost of	Tonne	62.75	65046.90	Sixty Five Thosand Fourty Six Rupees and Ninety Paise only.	4080490

Sl No	Description	Unit	Qunty	Rate in Rupees		Amount Rs
				Figures	Words	
	materials, labour, HOM complete as per specification. MORTH Specification No. 1600 & 2200. TMT Bars Fe 500					
24	KSRRB M2200-8. Providing weep holes in Brick masonry wrapping / Plain /Reinforced concrete abutment, wing wall / return wall with 100 mm dia AC pipe wrapping with Geotextile to prevent the earth, extending through the full width of the structure with slope of 1V :20H towards drawing force. Complete as per drawing and Technical Specifications including cost of materials, labour, HOM complete as per Specifications. MORTH Specification No.2706 & 2200	Nos/ Mtr	60	198.41	One Hundred Ninty Eight Rupees and Fourty One Paise only.	11905
25	KSRB M2600-3, (ii) providing and fixing 250mm wide,20mm thick compressable fibre board in expansion joint complete as per drawing and Technical Specification including cost of materials and labour,HOM complete as per specifications, MORTH Specification No 2605	Sqm	95	126.14	One Hundred Twenty Six Rupees and Fourteen Paise only.	11983

Sl No	Description	Unit	Qunty	Rate in Rupees		Amount Rs
				Figures	Words	
26	KSRRB M2200-9. Providing and laying of Filter media with granular materials /stone crushed aggregates satisfying the requirements laid down in clause 2504.2.2. of MORTH specifications to a thickness of not less than 600 mm with smaller size towards the soil and bigger size towards the wall and provided over the entire surface behind abutment, wing wall and return wall to the full height compacted to a firm condition complete as per drawing and Technical Specification including cost of materials, labour, HOM complete as per specifications. MORTH Specification No. 2504.2.2	Cum	72	2258.28	Two Thousand Two Hundred Fifty Eight Rupees and Twenty Eight Paise only.	162596
27	Providing and laying 100mm thick pre-cast cover slabs over drains of width not exceeding 800 mm using M20 concrete reinforced with steel @ 6.00 kg/Sqm, slabs jointed in CM 1:3 proportion and nicely finished including providing holes in the Cover slabs wherever necessary for easy drainage of surface water including of labour, materials, HOM, curing, lead and lift charges etc, Complete as per MORTH specifications No. 1500,1700.	m	1514.4	1145.86	One Thousand One Hundred Forty Five Rupees and Eighty Six Paise only.	1735290

Sl No	Description	Unit	Qunty	Rate in Rupees		Amount Rs
				Figures	Words	
28	Removing & Refixing stone slabs of drains and pointing in C.M (1:3) in all respects as directed by the Engineer In charge	Sqm	177	111.30	One Hundred Eleven Rupees and Thirty Paise only.	19700
29	Construction of granular sub-base Grading-V as Sub-base and drainage layer by providing coarse graded crushed stone aggregates of granite/trap/basalt material, mixing in a mechanical mix plant at OMC, Carriage of mixed material to work site, spreading in uniform layers with motor grader on prepared surface and compacting with vibratory power roller to achieve the 98 % proctor density, complete as per specifications. Clause 401 of MORTH V Revision.	Cum	1382	1994.92	One Thousand Nine Hundred Ninety Four Rupees and Ninety Two Paise only.	2757877
30	KSRRB M400-17. Providing, laying, spreading and compacting cushed stone aggregates of granite / trap / basalt to wet mix macadam specifications including pre mixing the material with water at OMC in mechanical mix plant carriage of mixed materials by tipper to site, laying in uniform layers with paver in sub-base/base course on well prepared surface and compacting with vibratory roller to achieve the desired density complete as per specifications. MORTH Specification No. 406	Cum	2294	2001.28	Two Thousand One Rupees and Twenty Eight Paise only.	4590436

Sl No	Description	Unit	Qunty	Rate in Rupees		Amount Rs
				Figures	Words	
31	KSRB 5.2 : Providing and constructing granite / trap / basalt size stone masonry in foundation with cement mortar, stone hammered dressed in courses not less than 20 cms high, bond stones at 2m. apart in each course including cost of materials, labour, curing complete as per specifications. KBS 5.1.13 KSRB 5.2-3 : - do - cement mortar 1:6 KBS 5.1.13	Cum	58	4871.76	Four Thousand Eight Hundred Seventy One Rupees and Seventy Six Paise only.	284288
32	Providing and constructing with avilable granite / trap / basalt size stone masonry in foundation with cement mortar & stone hammerd dressed in courses not less than 20 cms high, bond stones at 2m. apart in each course including cost of materials, labour, HOM, curing complete as per specifications. KBS 5.1.13 IN Cement Mortar 1 : 6	Cum	50	3287.74	Three Thousand Two Hundred Eighty Seven Rupees and Seventy Four Paise only.	163222
33	Providing flush pointing to square rubble , course or uncoursed stone masonry with cement mortar, 20mm deep, after raking joints to depth of 20mm nicely lining, including cost of materials, labour,HOM curing complete as per specifications in cement mortar 1:3	Sqm	450	148.40	One Hundred Forty Eight Rupees and Forty Paise only.	66780
34	KSRB 5-14: Providing and constructing load bearing wall with solid concrete blocks having block density	Cum	383	979.44	Nine Hundred Seventy Nine Rupees and Fourty Four	374636

Sl No	Description	Unit	Qunty	Rate in Rupees Figures	Rate in Rupees Words	Amount Rs
	not less than 1800kg/m3 having a minimum average compressive strength of 4.00 N/mm2 confirming to IS 2185 (Part 1):2005 and constructed with CM 1:4, as per IS 2572:2005 including cost of ail materials labour charges, scaffolding, curing, hire charges of machineries etc., complete as per specifications. KBS No.5.4 with solid concrete blocks of size 400x150x200mm				Paise only.	
35	KSRB - 15-3.9: Providing 20mm thick cement plaster in single coat with cement mortor ,1:4 to stone masonry& convrete surface including rounding off corners wherver required smooth rendering,: Providing and removing scaffolding, including cost of materials, labour, curing complete as per specifications. in cement mortar 1:3	Cum	1912.5	287.26	Two Hundred Eighty Seven Rupees and Twenty Six Paise only.	549385
36	KSRB 2.3: Filling available Excavated Earth (excluding rock) in sides of foundations upto plinth in layers not exceeding 20cms in depth, compacting each deposited layer by raming after watering with lead upto 50m and lift upto 1.50m including cost of all labour complete as per specifcations.Specification No.KBS 2.9	Cum	1371	213.06	Two Hundred Thirteen Rupees and Six Paise only.	292105

Sl No	Description	Unit	Qunty	Rate in Rupees		Amount Rs
				Figures	Words	
37	KSRRB M800-29.1. Providing and laying of a reinforced cement concrete pipe duct, 300 mm dia, across the road (new construction), extending from drain to drain in cuts and toe of slope to toe of slope in fills, constructing head walls at both ends, providing a minimum fill of granular material over top and sides of RCC pipe as per IRC:98-1997, bedded on a 0.3 m thick layer of granular material free of rock pieces, outer to outer distance of pipe at least half dia of pipe subject to minimum450 mm in case of double and triple row ducts, joints to be made leak proof, invert level of duct to be above higher than ground level to prevent entry of water and dirt, all as per IRC: 98 -1997 and approved drawings complete as per specifications. Case - 1: Single row for one utility service	m	224.00	1830.62	One Thousand Eight Hundred Thirty Rupees and Sixty Two Paise only.	410059
38	KSRRB 300-58. Compaction of original ground by mechanical means including filling in depression occuring during rolling including cost of all labour, HOM complete as per specifications. MORTH I Chapter 3	Sqm	3325.00	6.36	Six Rupees and Thirty Six Paise only.	21147

Sl No	Description	Unit	Qunty	Rate in Rupees		Amount Rs
				Figures	Words	
39	KSRRB M400-21. Construction of footpath/separator by providing a 150 mm compacted granular sub-base as per Clause 401 & 25mm thick cement concrete grade M-15, overlaid with precast concrete tiles in cement mortar 1:3 including provision of all drainage arrangementsbut excluding kerb channel complete as per specifications.MORTH Specification No. 409	Sqm	1769	730.34	Seven Hundred Thirty Rupees and Thirty Four Paise only.	1291606
40	Providing and fixing pre cast solid cement concrete kerb stones made out of C.C. 1:2:4 with top and bottom width 114 and 165 mm respectively, 400mm high and 450mm in length finished with CM 1:3 plastering and finishing cutting, including form work, curing, including cost of all materials, labour, hire charges of machinery, loading, unloading, lead and lift, transportation etc., completeas per the directions of engineer in-charge	Nos	8689	432.48	Four Hundred Thirty Two Rupees and Forty Eight Paise only.	3757771
41	KSRRB M300-18. Wrought iron and mild steel welded work (using angles, square bars, tees and channel grills, grating frames, gates and tree guards of any size and design etc. including cost of screens arid welding rods or bolts and nuts complete	Qntl	31	7618.22	Seven Thousand Six Hundred Eighteen Rupees and Twenty Two Paise only.	234451

Sl No	Description	Unit	Qunty	Rate in Rupees		Amount Rs
				Figures	Words	
	fixed in position but without the cost of excavation and concrete for fixing which will be paid separately complete as per specifications.(Surface grating)					
42	KSRRB 800-1. Painting two coats after filling the surface with synthetic enamel paint in approved shades on new plastered concrete surfaces, with materials, labour complete as per specifications. MORTH Chapter 8	Sqm	1227.74	84.80	Eighty Four Rupees and Eighty Paise only.	104112
43	Providing chain link fencing 50mm size o f 8 guage properly stretched between existing rectangular poles and fixed with suitable bolts & nuts, the free ends shall be welded to the pole and block pipe at top and bottom as required including cost of all materials, labour, lead and lifts and as per the directions of the Engineer-in-charge of w ork including two coats of approved quality paint over one coat o f shop paint, including cost of materials, labour,HOM com plete as per specifications.	Sqm	525	757.90	Seven Hundred Fifty Seven Rupees and Ninety Paise only.	397898

Sl No	Description	Unit	Qunty	Rate in Rupees		Amount Rs
				Figures	Words	
44	Construction of PRE-CAST RCC MANHOLE CHAMBERS of 1:1.5:3 proportion with ordinary port land cement, 20 mm and down size graded jelly, well graded sand, steel of approved quality and size, constructed using form vibrators of standard type. The top cover to be 200 mm thick concrete slab, wall thickness, raft thickness, offset in raft alround the chamber etc. as per the approved drawing. Benching concrete with 1:6 slope towards the central drain, finished smooth,fixing and grouting pipes. Supply and fixing SFRC manhole cover and frame (heavy duty) conforming to IS:12592 with latest amendments,on CC 1:2:4 bed, including necessary conveyance. Supply and fixingfootsteps (as per IS 10910) with 12 mm dia. steel bar (Fe-415),encapsuled in 3 mm thick plastic, fixed with CC block to the walls staggered at 300 mm etc. as detailed in Technical Specifications. Thewhole works includes sand bedding wherever necessary, disposal ofsurplus earth, barricading, danger lighting, sight rails, boning rods,shoring, strutting, watering, curing, engraving manhole number with flow direction on the inner cylindrical surface etc. The cost toinclude the cost of	Nos	5	30960.00	Thirty Thousand Nine Hundred Sixty Rupees only.	154800

Sl No	Description	Unit	Qunty	Rate in Rupees		Amount Rs
				Figures	Words	
	reinforcement steel, its fabrication charges, costand conveyances of all materials, labour, all leads and lifts. The Precast RCC manholes are for various diameters and depths as stated below and as per detailed drawings, specifications and direction ofthe Engineer.Constructing Pre-cast RCC Manholes 1.5 m internal dia., 2.0 M depth & SFRC cover & frame					
45	Constructing Pre-cast RCC Manholes 1.2 m internal dia., 1.3 M depth & SFRC cover & frame	Nos	4	36364.00	Thirty Six Thousand Three Hundred Sixty Four Rupees only.	145456
46	Constructing Pre-cast RCC Manholes 1.2 m internal dia., 1.6 M depth & SFRC cover & frame	Nos	5	41306.00	Forty One Thousand Three Hundred Six Rupees only.	206530
47	Constructing Pre-cast RCC Manholes 1.2 m internal dia., 1.9M depth & SFRC cover & frame	Nos	6	46074.00	Forty Six Thousand Seventy Four Rupees only.	276444
48	Constructing Pre-cast RCC Manholes 1.2 m internal dia., 2.0M depth & SFRC cover & frame	Nos	6.00	47373.00	Forty Seven Thousand Three Hundred Seventy Three Rupees only.	284238

Sl No	Description	Unit	Qunty	Rate in Rupees		Amount Rs
				Figures	Words	
49	Supplying S&S RCC SPUN / VIBRATED CAST PIPES (REINFORCED) pipes NP-3 Class conforming to IS:458-1988 with latest amendments using ordinary portland cement, for sanitary works and conveying to work site, rolling and lowering into trenches, laying true to line and level including loading and unloading at both destinations and jointing of pipes and specials including cost of specials, perfect linking of joints with jack to correct position including cost of jointing materials, i.e, rubber rings conforming to IS: 5382 for S&S RCC pipes, with all leads and lifts as directed and giving necessary hydraulic test as per ISS to the required pressure and commissioning etc. complete. (Contractor will make his own arrangements for procuring water for testing). Before the execution of the work, the contractor shall carry out the survey and will be paid extra for the same as per seperate item.:RCC NP3 Class pipe of 300 mm dia.	Rmt	655	1659.00	One Thousand Six Hundred Fifty Nine Rupees only.	1086645
50	KSRRB M500-6. Providing and applying primer coat with S.S. bitumen emulsion on prepared surface of granular base such as WMM including cleaning of road surface and spraying primer at the rate of 0.60 kg / sqm	Sqm	8701	29.68	Twenty Nine Rupees and Sixty Eight Paise only.	258246

Sl No	Description	Unit	Qunty	Rate in Rupees		Amount Rs
				Figures	Words	
	using mechanical means complete as per specifications. Clause 502 of MORTH V revision					
51	KSRRB 500-9. Providing and applying tack coat using 80/100 grade bitumen(VGIO) on granular base such as WBM surfaces hot bitumen primed at 4 kg per 10 sqm, heating bitumen in boiler fitted with spray set (excluding cleaning of road surface) including cost of all materials, labour, HOM complete as per specifications. Clause 503 of MORTH V revision	Sqm	10716	10.60	Ten Rupees and Sixty Paise only.	113590
52	KSRRB M500-17. Providing and laying dense graded bituminous macadam using crushed aggregates of specified grading; premixed with VG30 grade bituminous binder and, transporting the hot mix to work site, laying to the required grade, level and ialignment, rolling with smooth wheeled, vibratory and tandem rollers to achieve the desired compaction in all respects complete as per specifications. Clause 505 of MORTH V revision using 40/60 TPH capacity H.M.P. with - Mechanical paver Gr-II (50 mm to 75 mm) with 4.5 % VG-30 Bitumen	Cum	536	6407.70	Six Thousand Four Hundred Seven Rupees and Seventy Paise only.	3433246

Sl No	Description	Unit	Qunty	Rate in Rupees		Amount Rs
				Figures	Words	
53	KSRRB 500-7. Providing and applying tack coat using 80/100 grade bitumen(VG10) on the prepared black topped surfaces at 2.5 kg per 10 sqm, heating bitumen in boiler fitted with spray set (excluding cleaning of road surface) including cost of all materials, labour, HOM complete as per specifications.Clause 503 of MORTH V revision	Sqm	10716	12.72	Twelve Rupees and Seventy Two Paise only.	136308
54	Providing and laying bituminous concrete 40mm thick with hot mix plant, using crushed aggregates of specified grading, premixed with bituminous binder and filler, transporting the hot mix to work site, laying with a paver finisher to the required grade, level and alignment, rolling with smooth wheeled, vibratory and tandem rollers to achieve the desired compaction in all respects complete as per specifications. Clause 507 of MORTH V revision as per IRC SP-53-2015 using 40-60 TPH capacity HMP with mechanical paver grading II (30-45mm) with 5.4 % of modified bituminous binder consisting of 4.97% of VG-30 bitumen (60/70 grade) and 0.43% of plastomeric thermoplastics (waste plastic)	Cum	321	7537.66	Seven Thousand Five Hundred Thirty Seven Rupees and Sixty Six Paise only.	2423207

Sl No	Description	Unit	Qunty	Rate in Rupees		Amount Rs
				Figures	Words	
55	KSRRB M800-13.Road Marking with Hot Applied Thermoplastic Compound with Reflectrising Glass Beads on Bituminous Surface/ Concrete Surface: roviding and laying of hot applied thermoplastic compound 2.5 mm thick including reflectorising glass beads at 250 gms per sqm area, thickness of 2.5 mm is exclusive of surface applied glass beads as per IRC:35 standards specified. The finished surface to be level, uniform and free from streaks and holes complete as per specifications. MORTH Specification No. 803	Sqm	513.42	454.74	Four Hundred Fifty Four Rupees and Seventy Four Paise only.	233473
56	KSRRB M800-35. Road markers/Studs Supply and Installtion of Moulded Shank Raised Pavement Markers made of polycarbonate and ABS(Acrylonitrile Butadiene Styrene) moulded body and reflective panels with micro prismatic lens capable of providing total internal reflection of the light entering the lens face and shall support a load of 16000 kg tested in accordance to Specifications of Category A of MORTH Circular No RW/ NH/33023/10-97 - DO III Dt 11.06.1997. The height, width and length shall not exceed 50 mm, 100 mm and 102 mm and with minimum reflective area of 13 Sqcm on each side and the slope to	Nos	502	357.22	Three Hundred Fifty Seven Rupees and Twenty Two Paise only.	179324

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	the base shall be 35 degree. The strength of detachment of the integrated cylindrical shanks, (of diameter not less than 19 mm and height not less than 30 mm) from the body is to be a minimum value of 500 Kg. Fixing will be by drilling holes on the road for the shanks to go inside, without nails and using epoxy resin based adhesive as per manufacturer's recommendation and complete as directed by the engineer.					
57	Retro-Reflectorised Traffic Signs: Providing and fixing of retro - reflectorised cautionary, mandatory and informatory sign as per IRC:67 made of high intensity grade sheeting vide Clause 801.3, fixed over aluminium sheeting, 1.5 mm thick supported on a mild steel angle iron post 75 mm x 75 mm x 6 mm firmly fixed to the ground by means of properly designed oundation with M 15 grade cement concrete 45 cm x 45 cm x 60 cm, 60 cm below ground level as per approved drawing.- 600mm Equilateral triangle- TYPE XI	Nos	4	2642.58	Two Thousand Six Hundred Forty Two Rupees and Fifty Eight Paise only.	10570
58	- do-900mm equilateral -	Nos	4	3661.24	Three Thousand Six Hundred Sixty One Rupees and Twenty Four Paise only.	14645

Sl No	Description	Unit	Qunty	Rate in Rupees		Amount Rs
				Figures	Words	
59	- do-STOP - 900 mm Octogonal type	Nos	4	5349.82	Five Thousand Three Hundred Forty Nine Rupees and Eighty Two Paise only.	21399
60	Direction and Place Identification Signs upto 0.9 sqm Size Board: Providing and erecting direction and place identification retro-reflectorised sign as per IRC:67 made of high intensity grade sheeting vide Clause 801.3, fixed over aluminium sheeting, 2 mm thick with area not exceeding 0.9 sqm supported on a mild steel single angle iron post 75 x 75 x 6 mm firmly fixed to the ground by means of properly designed foundation with M 15 grade cement concrete 45 x 45 x 60 cm, 60 cm below ground level as per approved drawing	Sqm	2.43	7274.78	Seven Thousand Two Hundred Seventy Four Rupees and Seventy Eight Paise only.	17678
61	Earth work in excavation for foundation of structures like culverts , retaining walls etc., as per drawing and technical specification, including setting out, construction of shoring and bracing, dressing of sides and bottom, back filling with approved material, disposal of balance earth as per specifications, including cost of labour, HOM etc, complete. in all kinds of soil by manual	Cum	20.27	190.80	One Hundred Ninety Rupees and Eighty Paise only.	3868

Sl No	Description	Unit	Qunty	Rate in Rupees		Amount Rs
				Figures	Words	
	means					
62	KSRRB M2900-1. Plain cement concrete M10 mix with crushed stone aggregate 40mm nominal size mechanically mixed, placed in foundation and compacted by vibration including curing including cost of materials,labour, HOM complete as per specifications.MORTH Specification No. 408	Cum	0.54	4567.01	Four Thousand Five Hundred Sixty Seven Rupees and One Paise only.	2466
63	KSRB 5-14: Providing and constructing load bearing wall with solid concrete blocks having block density not less than 1800kg/m3 having a minimum average compressive strength of 5.00 N/mm2 confirming to IS 2185 (Part 1):2005 and constructed with CM 1:4, as per IS 2572:2005 including cost of ail materials labour charges, scaffolding, curing, hire charges of machineries etc., complete as per specifications. KBS No.5.4 with solid concrete blocks of size 400x200x200mm	Cum	54.00	966.72	Nine Hundred Sixty Six Rupees and Seventy Two Paise only.	52203
64	Providing rulled pointing to coursed stone masonry with cement mortar, 20mm deep, after raking joints to depth of 20mm nicely lining, including cost of materials,	Sqm	108.00	148.40	One Hundred Forty Eight Rupees and Forty Paise only.	16027